Refine Search

Search Results -

Terms	Documents
plant adj transformation and lecithin adj cholesterol adj acyltransferase	0

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L10

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Friday, December 10, 2004 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=OR			
L10	plant adj transformation and lecithin adj cholesterol adj acyltransferase	0	L10
L9	plant adj sterol and lecithin adj cholesterol adj acyltransferase	29	L9
L8	plant sterol and lecithin adj cholesterol adj acyltransferase	744189	L8
L7	L4 and plant.clm.	2	L7
L6	L4 and plant	246	L6
L5	L1 and (lecithin near3 acyltransferase).clm.	6	L5
L4	L1 and (lecithin near3 acyltransferase)	246	L4
L3	L1 anf (lecithin near3 acyltransferase)	4958	L3
L2	L1 anf lecithin near3 acyltransferase	4958	L2
L1	acyltransferase and lecithin and cholesterol and plant	343	L1

END OF SEARCH HISTORY

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FILE 'BIOSIS' ENTERED AT 15:50:34 ON 10 DEC 2004
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FILE 'EMBASE' ENTERED AT 15:50:34 ON 10 DEC 2004
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FILE 'CAPLUS' ENTERED AT 15:50:34 ON 10 DEC 2004
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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=> s lecithin(w)cholesterol(w)acyltransferase
L1         5907 LECITHIN(W) CHOLESTEROL(W) ACYLTRANSFERASE

=> s l1 and plant
L2           92 L1 AND PLANT

=> duplicate remove l2
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L2
L3            64 DUPLICATE REMOVE L2 (28 DUPLICATES REMOVED)

=> s l1 and pd <1999
'1999' NOT A VALID FIELD CODE
   2 FILES SEARCHED...
   3 FILES SEARCHED...
L4         4738 L1 AND PD <1999

=>

=>  1999

1999 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=>

=>

=>

=>

=>.

=>

=> d l3 1-10 ti

L3    ANSWER 1 OF 64  CAPLUS  COPYRIGHT 2004 ACS on STN
TI    Method for producing polyunsaturated fatty acids, lipids, and oils in
      transgenic organisms expressing fungal acyltransferases
```

L3 ANSWER 2 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 1
TI Expression in yeast of a novel phospholipase A1 cDNA from Arabidopsis thaliana.

L3 ANSWER 3 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 2
TI Cloning and functional characterization of a Phospholipid:Diacylglycerol acyltransferase from Arabidopsis.

L3 ANSWER 4 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 3
TI Compared with acyl-CoA: Cholesterol O-acyltransferase (ACAT) 1 and ***lecithin*** : ***Cholesterol*** ***acyltransferase*** , ACAT2 displays the greatest capacity to differentiate cholesterol from sitosterol.

L3 ANSWER 5 OF 64 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 4
TI Pharmacotherapy for dyslipidaemia - Current therapies and future agents.

L3 ANSWER 6 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 5
TI The human cholesteryl ester transfer protein I405V polymorphism is associated with plasma cholesterol concentration and its reduction by dietary phytosterol esters.

L3 ANSWER 7 OF 64 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
TI Accumulation of genistein and lipophilic genistein derivatives in lipoproteins during incubation with human plasma in vitro.

L3 ANSWER 8 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI The seeds from Plantago ovata lower plasma lipids by altering hepatic and bile acid metabolism in guinea pigs.

L3 ANSWER 9 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 6
TI Lipoprotein-associated estrogens.

L3 ANSWER 10 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 7
TI Lipid lowering activity of Phyllanthus niruri in hyperlipemic rats.

=> d l3 1-4 ibib ab

L3 ANSWER 1 OF 64 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:857694 CAPLUS
DOCUMENT NUMBER: 141:344590
TITLE: Method for producing polyunsaturated fatty acids, lipids, and oils in transgenic organisms expressing fungal acyltransferases
INVENTOR(S): Renz, Andreas; Bauer, Joerg; Frentzen, Margit; Soezer,

Nursen; Keith, Stobart; Fraser, Thomas; Lazarus, Colin M.; Qi, Baoxiu; Abbadi, Amine; Heinz, Ernst

PATENT ASSIGNEE(S): University of Bristol, UK

SOURCE: PCT Int. Appl., 270 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087902	A2	20041014	WO 2004-EP3224	20040326

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DE 2003-10314759 A 20030331
DE 2003-10348996 A 20031017

AB The invention relates to a method for the prodn. of long-chained, multiply unsatd. fatty acids in an organism, wherein nucleic acids coding for proteins with acyltransferase activity are introduced into the organism. Said nucleic acid sequences can be advantageously expressed in the organism, optionally together with other nucleic acid sequences encoding enzymes involved in the biosynthesis of fatty acids or in lipid metab. The invention also relates to a method for the prodn. of oils and/or triacylglycerides with an increased content of long-chained, multiply unsatd. fatty acids. The invention further relates to the nucleic acid sequences, vectors contg. the nucleic acid sequences, and transgenic organisms contg. the above-mentioned nucleic acid sequences or vectors. The invention addnl. relates to oils, lipids and/or fatty acids produced according to the inventive method and to the utilization thereof in feed, food, cosmetics, and pharmaceuticals. Thus, lysophosphatidic acid acyltransferase, glycerol-3-phosphate acyltransferase, diacylglyerol acyltransferase, and ***lecithin*** - ***cholesterol*** ***acyltransferase*** of Thraustochytrium, Physcomitrella patens, Cryptothecodinium cohnii, Mortierella alpina, Shewanella hanedai, and Fusarium graminearum and the corresponding cDNAs are disclosed. Acyl CoA:lysophospholipid acyltransferase cDNAs of Caenorhabditis elegans were cloned, sequenced, and expressed in yeast, tobacco, and flax and the alteration of the lipid profile was detd. The fungal acyltransferases were expressed in A. thaliana, tobacco, flax, and rape.

L3 ANSWER 2 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 1

ACCESSION NUMBER: 2004:441893 BIOSIS

DOCUMENT NUMBER: PREV200400446784

TITLE: Expression in yeast of a novel phospholipase A1 cDNA from Arabidopsis thaliana.

AUTHOR(S): Noiriel, Alexandre; Benveniste, Pierre; Banas, Antoni;

Stymne, Sten; Bouvier-Nave, Pierrette [Reprint Author]

CORPORATE SOURCE: CNRSInst Biol Mol PlantesDept Isoprenoides, Inst Bot, 28 Rue Goethe, F-67083, Strasbourg, France
Pierrette.Nave@bota-ulp.u-strasbg.fr

SOURCE: European Journal of Biochemistry, (September 2004) Vol. 271, No. 18, pp. 3752-3764. print.
ISSN: 0014-2956 (ISSN print).

DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 17 Nov 2004
Last Updated on STN: 17 Nov 2004

AB During a search for cDNAs encoding ***plant*** sterol acyltransferases, we isolated four full-length cDNAs from Arabidopsis thaliana that encode proteins with substantial identity with animal ***lecithin*** : ***cholesterol*** ***acyltransferases*** (LCATs). The expression of one of these cDNAs, AtLCAT3 (At3g03310), in various yeast strains resulted in the doubling of the triacylglycerol content. Furthermore, a complete lipid analysis of the transformed wild-type yeast showed that its phospholipid content was lower than that of the control (void plasmid-transformed) yeast whereas lysophospholipids and free fatty acids increased. When microsomes from the AtLCAT3-transformed yeast were incubated with di-(1-14C)oleyl phosphatidylcholine, both the lysophospholipid and free fatty acid fractions were highly and similarly labelled, whereas the same incubation with microsomes from the control yeast produced a negligible labelling of these fractions. Moreover when microsomes from AtLCAT3-transformed yeast were incubated with either sn-1- or sn-2-(1-14C)acyl phosphatidylcholine, the distribution of the labelling between the free fatty acid and the lysophosphatidylcholine fractions strongly suggested a phospholipase A1 activity for AtLCAT3. The sn-1 specificity of this phospholipase was confirmed by gas chromatography analysis of the hydrolysis of 1-myristoyl, 2-oleyl phosphatidylcholine. Phosphatidylethanolamine and phosphatidic acid were shown to be also hydrolysed by AtLCAT3, although less efficiently than phosphatidylcholine. Lysophospatidylcholine was a weak substrate whereas tripalmitoylglycerol and cholesteryl oleate were not hydrolysed at all. This novel A. thaliana phospholipase A1 shows optimal activity at pH 6-6.5 and 60-65 degreeC and appears to be unaffected by Ca2+. Its sequence is unrelated to all other known phospholipases. Further studies are in progress to elucidate its physiological role.

L3 ANSWER 3 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 2

ACCESSION NUMBER: 2004:354070 BIOSIS
DOCUMENT NUMBER: PREV200400354408

TITLE: Cloning and functional characterization of a Phospholipid:Diacylglycerol acyltransferase from Arabidopsis.

AUTHOR(S): Stahl, Ulf; Carlsson, Anders S. [Reprint Author]; Lenman, Marit; Dahlqvist, Anders; Huang, Bangquan; Banas, Walentyna; Banas, Antoni; Stymne, Sten

CORPORATE SOURCE: Dept Crop Sci, Swedish Univ Agr Sci, S-23053, Alnarp, Sweden
anders.carlsson@vv.slu.se

SOURCE: Plant Physiology (Rockville), (July 2004) Vol. 135, No. 3, pp. 1324-1335. print.
ISSN: 0032-0889 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English
ENTRY DATE: Entered STN: 26 Aug 2004
Last Updated on STN: 26 Aug 2004

AB A new pathway for triacylglycerol biosynthesis involving a phospholipid:diacylglycerol acyltransferase (PDAT) was recently described (Dahlqvist A, Stahl U, Lenman M, Banas A, Lee M, Sandager L, Ronne H, Stymne S, (2000) Proc Natl Acad Sci USA 97: 6487-6492). The LRO1 gene that encodes the PDAT was identified in yeast (Saccharomyces cerevisiae) and shown to have homology with animal ***lecithin*** : ***cholesterol*** ***acyltransferase*** . A search of the Arabidopsis genome database identified the protein encoded by the At5g13640 gene as the closest homolog to the yeast PDAT (28% amino acid identity). The cDNA of At5g13640 (AtPDAT gene) was overexpressed in Arabidopsis behind the cauliflower mosaic virus promoter. Microsomal preparations of roots and leaves from overexpressers had PDAT activities that correlated with expression levels of the gene, thus demonstrating that this gene encoded PDAT (AtPDAT). The AtPDAT utilized different phospholipids as acyl donor and accepted acyl groups ranging from C10 to C22. The rate of activity was highly dependent on acyl composition with highest activities for acyl groups containing several double bonds, epoxy, or hydroxy groups. The enzyme utilized both sn-positions of phosphatidylcholine but had a 3-fold preference for the sn-2 position. The fatty acid and lipid composition as well as the amounts of lipids per fresh weight in Arabidopsis ***plants*** overexpressing AtPDAT were not significantly different from the wild type. Microsomal preparations of roots from a T-DNA insertion mutant in the AtPDAT gene had barely detectable capacity to transfer acyl groups from phospholipids to added diacylglycerols. However, these microsomes were still able to carry out triacylglycerol synthesis by a diacylglycerol:diacylglycerol acyltransferase reaction at the same rate as microsomal preparations from wild type.

L3 ANSWER 4 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 3
ACCESSION NUMBER: 2004:72411 BIOSIS
DOCUMENT NUMBER: PREV200400076068
TITLE: Compared with acyl-CoA: Cholesterol O-acyltransferase (ACAT) 1 and ***lecithin*** : ***Cholesterol*** ***acyltransferase*** , ACAT2 displays the greatest capacity to differentiate cholesterol from sitosterol.
AUTHOR(S): Temel, Ryan E. [Reprint Author]; Gebre, Abraham K.; Parks, John S.; Rudel, Lawrence L.
CORPORATE SOURCE: Dept. of Pathology, Wake Forest University School of Medicine, Hanes Bldg., 6th Floor, Winston-Salem, NC, 27157, USA
rtemel@wfubmc.edu; lrudel@wfubmc.edu
SOURCE: Journal of Biological Chemistry, (November 28 2003) Vol. 278, No. 48, pp. 47594-47601. print.
CODEN: JBCHA3. ISSN: 0021-9258.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Feb 2004
Last Updated on STN: 4 Feb 2004

AB The capacity of acyl-CoA:cholesterol O-acyltransferase (ACAT) 2 to differentiate cholesterol from the ***plant*** sterol, sitosterol, was compared with that of the sterol esterifying enzymes, ACAT1 and ***lecithin*** : ***cholesterol*** ***acyltransferase*** (LCAT).

Cholesterol-loaded microsomes from transfected cells containing either ACAT1 or ACAT2 exhibited significantly more ACAT activity than their sitosterol-loaded counterparts. In sitosterolloaded microsomes, both ACAT1 and ACAT2 were able to esterify sitosterol albeit with lower efficiencies than cholesterol. The mass ratios of cholesterol ester to sitosterol ester formed by ACAT1 and ACAT2 were 1.6 and 7.2, respectively. Compared with ACAT1, ACAT2 selectively esterified cholesterol even when sitosterol was loaded into the microsomes. To further characterize the difference in sterol specificity, ACAT1 and ACAT2 were compared in intact cells loaded with either cholesterol or sitosterol. Despite a lower level of ACAT activity, the ACAT1-expressing cells esterified 4-fold more sitosterol than the ACAT2 cells. The data showed that compared with ACAT1, ACAT2 displayed significantly greater selectively for cholesterol compared with sitosterol. The plasma cholesterol esterification enzyme ***lecithin*** : ***cholesterol*** ***acyltransferase*** was also compared. With recombinant high density lipoprotein particles, the esterification rate of cholesterol by LCAT was only 15% greater than for sitosterol. Thus, LCAT was able to efficiently esterify both cholesterol and sitosterol. In contrast, ACAT2 demonstrated a strong preference for cholesterol rather than sitosterol. This sterol selectivity by ACAT2 may reflect a role in the sorting of dietary sterols during their absorption by the intestine in vivo.

=> d l3 5-10 ibib

L3 ANSWER 5 OF 64 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN DUPLICATE 4

ACCESSION NUMBER: 2003463371 EMBASE
TITLE: Pharmacotherapy for dyslipidaemia - Current therapies and future agents.
AUTHOR: Bays H.; Stein E.A.
CORPORATE SOURCE: Dr. H. Bays, L-MARC Research Center, 3288 Illinois Avenue, Louisville, KY 40213, United States. HBaysMD@aol.com
SOURCE: Expert Opinion on Pharmacotherapy, (2003) 4/11 (1901-1938). Refs: 225
ISSN: 1465-6566 CODEN: EOPHF7
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English

L3 ANSWER 6 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 5

ACCESSION NUMBER: 2003:393370 BIOSIS
DOCUMENT NUMBER: PREV200300393370
TITLE: The human cholesteryl ester transfer protein I405V polymorphism is associated with plasma cholesterol concentration and its reduction by dietary phytosterol esters.
AUTHOR(S): Lottenberg, Ana M. [Reprint Author]; Nunes, Valeria S.; Nakandakare, Edna R.; Neves, Monica; Bernik, Marcia; Lagrost, Laurent; dos Santos, Jose E.; Quintao, Eder
CORPORATE SOURCE: Lipid Laboratory, Medical School, University of Sao Paulo,

LIM10, Sao Paulo, Brazil
lipideq@usp.br
SOURCE: Journal of Nutrition, (June 2003) Vol. 133, No. 6, pp. 1800-1805. print.
ISSN: 0022-3166 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Aug 2003
Last Updated on STN: 27 Aug 2003

L3 ANSWER 7 OF 64 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
ACCESSION NUMBER: 2003:30671 AGRICOLA
DOCUMENT NUMBER: IND23326146
TITLE: Accumulation of genistein and lipophilic genistein derivatives in lipoproteins during incubation with human plasma in vitro.
AUTHOR(S): Kaamanen, M.; Adlercreutz, H.; Jauhiainen, M.; Tikkanen, M.J.
AVAILABILITY: DNAL (381 B522)
SOURCE: Biochimica et biophysica acta = International journal of biochemistry and biophysics, Mar 17, 2003. Vol. 1631, No. 2. p. 147-152
Publisher: Amsterdam : Elsevier Science B.V.
CODEN: BBACAQ; ISSN: 0006-3002
NOTE: Includes references
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Article
FILE SEGMENT: Non-U.S. Imprint other than FAO
LANGUAGE: English

L3 ANSWER 8 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2002:362034 BIOSIS
DOCUMENT NUMBER: PREV200200362034
TITLE: The seeds from Plantago ovata lower plasma lipids by altering hepatic and bile acid metabolism in guinea pigs.
AUTHOR(S): Romero, Ana Lourdes [Reprint author]; West, Kristy L.; Zern, Tosca; Fernandez, Maria Luz
CORPORATE SOURCE: Department of Food Science, University of Sonora, Hermosillo, SON, Mexico
maria-luz.fernandez@uconn.edu
SOURCE: Journal of Nutrition, (June, 2002) Vol. 132, No. 6, pp. 1194-1198. print.
CODEN: JONUAI. ISSN: 0022-3166.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Jun 2002
Last Updated on STN: 26 Jun 2002

L3 ANSWER 9 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 6
ACCESSION NUMBER: 2003:24021 BIOSIS
DOCUMENT NUMBER: PREV200300024021
TITLE: Lipoprotein-associated estrogens.

AUTHOR(S): Tikkanen, Matti J. [Reprint Author]; Vihma, Veera; Jauhiainen, Matti; Hockerstedt, Anna; Helisten, Hannamaarit; Kaamanen, Maija
CORPORATE SOURCE: Department of Medicine, Division of Cardiology, Helsinki University Central Hospital, 00290, Helsinki, Finland matti.tikkanen@hus.fi
SOURCE: Cardiovascular Research, (November 2002) Vol. 56, No. 2, pp. 184-188. print.
CODEN: CVREAU. ISSN: 0008-6363.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Jan 2003
Last Updated on STN: 1 Jan 2003

L3 ANSWER 10 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 7
ACCESSION NUMBER: 2002:541156 BIOSIS
DOCUMENT NUMBER: PREV200200541156
TITLE: Lipid lowering activity of Phyllanthus niruri in hyperlipemic rats.
AUTHOR(S): Khanna, A. K.; Rizvi, F.; Chander, R. [Reprint author]
CORPORATE SOURCE: Division of Biochemistry, Central Drug Research Institute, Lucknow, 226001, India
SOURCE: Journal of Ethnopharmacology, (September, 2002) Vol. 82, No. 1, pp. 19-22. print.
CODEN: JOETD7. ISSN: 0378-8741.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Oct 2002
Last Updated on STN: 16 Oct 2002

=> d l3 11-20 ibib

L3 ANSWER 11 OF 64 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:168132 CAPLUS
DOCUMENT NUMBER: 134:218021
TITLE: Nucleic acids encoding ***plant*** sterol acyltransferases and their use to modify sterol composition
INVENTOR(S): Lassner, Michael; Van Eenennaam, Alison
PATENT ASSIGNEE(S): Monsanto Company, USA
SOURCE: PCT Int. Appl., 127 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016308	A2	20010308	WO 2000-US23863	20000830
WO 2001016308	A3	20020117		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2381901	AA	20010308	CA 2000-2381901	20000830
BR 2000014154	A	20020507	BR 2000-14154	20000830
EP 1210417	A2	20020605	EP 2000-959644	20000830
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003508052	T2	20030304	JP 2001-520855	20000830
ZA 2002001410	A	20030606	ZA 2002-1410	20020219
PRIORITY APPLN. INFO.:			US 1999-152493P P	19990830
			WO 2000-US23863 W	20000830

L3 ANSWER 12 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 8

ACCESSION NUMBER: 2001:414984 BIOSIS
DOCUMENT NUMBER: PREV200100414984
TITLE: Effect of administration with the extract of Gymnema sylvestre R. Br leaves on lipid metabolism in rats.
AUTHOR(S): Shigematsu, Norihiro [Reprint author]; Asano, Ryuji; Shimosaka, Makoto; Okazaki, Mitsuo
CORPORATE SOURCE: Biosci. Textile Technol., Shinshu University, 3-15-1 Tokida, Ueda, Nagano, 386-8567, Japan
noshigematsu@fancl.co.jp
SOURCE: Biological and Pharmaceutical Bulletin, (June, 2001) Vol. 24, No. 6, pp. 713-717. print.
ISSN: 0918-6158.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Aug 2001
Last Updated on STN: 22 Feb 2002

L3 ANSWER 13 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2001:246284 BIOSIS
DOCUMENT NUMBER: PREV200100246284
TITLE: The effect of estrogen and ***plant*** estrogens on lipoproteins.
AUTHOR(S): Tikkanen, M. J. [Reprint author]; Adlercreutz, H. [Reprint author]; Helisten, H. [Reprint author]; Hockerstedt, A. [Reprint author]; Jauhiainen, M. [Reprint author]; Kaamanen, M. [Reprint author]; Tiitinen, A. [Reprint author]; Wahala, K. [Reprint author]
CORPORATE SOURCE: Dept. of Medicine, University of Helsinki, Helsinki, Finland
SOURCE: Pfluegers Archiv European Journal of Physiology, (2001) Vol. 441, No. 6 Supplement, pp. R121. print.
Meeting Info.: Joint Congress of the Scandinavian and the German Physiological Societies. Berlin, Germany. March 10-13, 2001.
CODEN: PFLABK. ISSN: 0031-6768.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English

ENTRY DATE: Entered STN: 23 May 2001
Last Updated on STN: 19 Feb 2002

L3 ANSWER 14 OF 64 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:384442 CAPLUS
DOCUMENT NUMBER: 133:27387
TITLE: Polynucleotides (cDNA) and polypeptides of ***plant*** ***lecithin*** ***cholesterol*** ***acyltransferase*** sequence homologs, sequences and biological uses thereof
INVENTOR(S): Cahoon, Rebecca E.; Kinney, Anthony J.; Sakai, Hajime; Shen, Jennie Bih-jien; Butler, Karlene H.; Saylor, James J.
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032791	A2	20000608	WO 1999-US28586	19991202
WO 2000032791	A3	20000914		

W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-110782P P 19981203

L3 ANSWER 15 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 9
ACCESSION NUMBER: 2000:345817 BIOSIS
DOCUMENT NUMBER: PREV200000345817
TITLE: Phospholipid:diacylglycerol acyltransferase: An enzyme that catalyzes the acyl-CoA-independent formation of triacylglycerol in yeast and ***plants*** .
AUTHOR(S): Dahlqvist, Anders [Reprint author]; Stahl, Ulf; Lenman, Marit; Banas, Antoni; Lee, Michael; Sandager, Line; Ronne, Hans; Stymne, Sten
CORPORATE SOURCE: Scandinavian Biotechnology Research (ScanBi) AB, Herman Ehles Vag 2, S-26831, Svalov, Sweden
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (June 6, 2000) Vol. 97, No. 12, pp. 6487-6492. print.
CODEN: PNASA6. ISSN: 0027-8424.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Aug 2000
Last Updated on STN: 7 Jan 2002

L3 ANSWER 16 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 10

ACCESSION NUMBER: 2000:341797 BIOSIS
DOCUMENT NUMBER: PREV200000341797
TITLE: Pharmacological properties of ***plant*** sterols: In vivo and in vitro observations.
AUTHOR(S): Moghadasian, Mohammed H. [Reprint author]
CORPORATE SOURCE: Healthy Heart Program and Department of Pathology and Laboratory Medicine, St. Paul's Hospital and the University of British Columbia, 180-1081 Burrard St., Vancouver, BC, V6Z 1Y6, Canada
SOURCE: Life Sciences, (June 30, 2000) Vol. 67, No. 6, pp. 605-615. print.
CODEN: LIFSAK. ISSN: 0024-3205.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Aug 2000
Last Updated on STN: 7 Jan 2002

L3 ANSWER 17 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2000:302153 BIOSIS
DOCUMENT NUMBER: PREV200000302153
TITLE: Astragalus mongholicus and Angelica sinensis compound alleviates nephrotic hyperlipidemia in rats.
AUTHOR(S): Li Jingzi [Reprint author]; Yu Lei [Reprint author]; Li Ningjun [Reprint author]; Wang Haiyan [Reprint author]
CORPORATE SOURCE: Department of Nephrology, Research Institute of Nephrology, First Hospital, Beijing Medical University, Beijing, 100034, China
SOURCE: Chinese Medical Journal (English Edition), (April, 2000) Vol. 113, No. 4, pp. 310-314. print.
CODEN: CMJODS. ISSN: 0366-6999.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 12 Jul 2000
Last Updated on STN: 7 Jan 2002

L3 ANSWER 18 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1999:475710 BIOSIS
DOCUMENT NUMBER: PREV199900475710
TITLE: Effect of inclusion of cashew globulin (Anacardium occidentale) to a casein diet on lipid parameters in rats.
AUTHOR(S): Prabha, S. P. S.; Rajamohan, T. [Reprint author]
CORPORATE SOURCE: Department of Biochemistry, University of Kerala, Kariavattom, Trivandrum, KER, 695 581, India
SOURCE: Plant Foods for Human Nutrition (Dordrecht), (1998) Vol. 53, No. 1, pp. 83-92. print.
CODEN: PFHNE8. ISSN: 0921-9668.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Nov 1999
Last Updated on STN: 9 Nov 1999

L3 ANSWER 19 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1998:308035 BIOSIS

DOCUMENT NUMBER: PREV199800308035
TITLE: Hypolipidemic effect of flavonoids from Solanum melongena.
AUTHOR(S): Sudheesh, S.; Presannakumar, G.; Vijayakumar, S.; Vijayalakshmi, N. R. [Reprint author]
CORPORATE SOURCE: Dep. Biochemistry, Univ. Kerala, Kariavattom, Thiruvananthapuram-695 581, India
SOURCE: Plant Foods for Human Nutrition (Dordrecht), (1997) Vol. 51, No. 4, pp. 321-330. print.
CODEN: PFHNE8. ISSN: 0921-9668.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jul 1998
Last Updated on STN: 13 Aug 1998

L3 ANSWER 20 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 11
ACCESSION NUMBER: 1997:387450 BIOSIS
DOCUMENT NUMBER: PREV199799686653
TITLE: The cholesterol-raising diterpenes from coffee beans increase serum lipid transfer protein activity levels in humans.
AUTHOR(S): Van Tol, Arie [Reprint author]; Urgert, Rob; De Jong-Caesar, Ruth; Van Gent, Teus; Scheek, Leo M.; De Roos, Baukje; Katan, Martijn B.
CORPORATE SOURCE: Dep. Biochem., Cardiovascular Res. Inst., Fac. Med. Health Sciences, Erasmus Univ. Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, Netherlands
SOURCE: Atherosclerosis, (1997) Vol. 132, No. 2, pp. 251-254.
CODEN: ATHSBL. ISSN: 0021-9150.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Sep 1997
Last Updated on STN: 10 Sep 1997

=> d l3 18-20 ab

L3 ANSWER 18 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
AB The effect of inclusion of cashew globulin to a casein diet on lipid metabolism was studied in rats fed diets with two levels of cashew globulin meal. Inclusion of cashew globulin to a casein diet produced lower levels of total cholesterol, triacylglycerol and phospholipids in the serum and tissues and lower levels of serum lipoprotein cholesterol. There was decreased cholesterogenesis in the liver as evidenced by decreased activity of HMG CoA reductase and decreased release of lipoproteins into circulation. Rats fed cashew globulin along with casein also showed higher activity of LPL in the heart and adipose tissue and higher activity of LCAT. Increased hepatic diversion of cholesterol to bile acid synthesis and increased excretion of bile acids and sterols were also observed in these groups. Activity of glucose-6-phosphate dehydrogenase and malic enzyme was decreased in rats fed cashew globulin along with casein. This study demonstrates that cashew globulins included in the diet of rats are able to alter lipid metabolism which results in lower levels of lipid parameters in the serum and tissues.

L3 ANSWER 19 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on

STN

AB Flavonoids extracted from the fruits of Solanum melongena (Brinjal) orally administered at a dose of 1 mg/100 g BW/day showed significant hypolipidemic action in normal and cholesterol fed rats. HMG CoA reductase activity was found to be enhanced, while activities of glucose-6-phosphate dehydrogenase and malate dehydrogenase were significantly reduced. Activities of lipoprotein lipase and plasma LCAT showed significant enhancement. A significant increase in the concentrations of hepatic and fecal bile acids and fecal neutral sterols was also observed indicating a higher rate of degradation of cholesterol.

L3 ANSWER 20 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 11

AB Cafestol and kahweol-diterpenes present in unfiltered coffee - strongly raise serum VLDL and LDL cholesterol and slightly reduce HDL cholesterol in humans. The mechanism of action is unknown. We determined whether the coffee diterpenes may affect lipoprotein metabolism via effects on lipid transfer proteins and ***lecithin*** : ***cholesterol*** ***acyltransferase*** in a randomized, double-blind cross-over study with 10 healthy male volunteers. Either cafestol (61-64 mg,/day) or a mixture of cafestol (60 mg/day) and kahweol (48-54 mg/day) was given for 28 days. Serum activity levels of cholesterylester transfer protein, phospholipid transfer protein and ***lecithin*** : ***cholesterol*** ***acyltransferase*** were measured using exogenous substrate assays. Relative to baseline values, cafestol raised the mean (+- S.D.) activity of cholesterylester transfer protein by 18 +- 12% and of phospholipid transfer protein by 21 +- 14% (both P lt 0.001). Relative to cafestol alone, kahweol had no significant additional effects. ***Lecithin*** : ***cholesterol*** ***acyltransferase*** activity was reduced by 11 +- 12% by cafestol plus kahweol (P = 0.02). It is concluded that the effects of coffee diterpenes on plasma lipoproteins may be connected with changes in serum activity levels of lipid transfer proteins.

=> d l3 21-25 ibib ab

L3 ANSWER 21 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 1997:385367 BIOSIS
DOCUMENT NUMBER: PREV199799684570
TITLE: Immobilized Cratylia mollis lectin as a potential matrix to isolate plasma glycoproteins, including ***lecithin*** - ***cholesterol*** ***acyltransferase*** .
AUTHOR(S): Lima, Vera L. M.; Correia, Maria T. S.; Cechinel, Yeda M. N.; Sampaio, Claudio A. M.; Owen, James S.; Coelho, Luana C. B. B.
CORPORATE SOURCE: Univ. Dep. Med., Royal Free Hosp. Sch. Med., Rowland Hill St., London NW3 2PF, UK
SOURCE: Carbohydrate Polymers, (1997) Vol. 33, No. 1, pp. 27-32. CODEN: CAPOD8. ISSN: 0144-8617.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Sep 1997
Last Updated on STN: 10 Sep 1997

AB A crude seed extract from the native Brazilian forage, Cratylia mollis Mart., and its purified lectin (termed Cra), were found to precipitate glycoproteins from serum. An affinity column of Cra lectin coupled to

Sepharose CL-4B was prepared and its ability to isolate glycoproteins from human plasma compared to that of a commercial immobilized lectin, Concanavalin (Con) A-Sepharose. Although both lectins are of the alpha-D-mannose/alpha-D-glucose binding class, clear differences in the type and amount of serum glycoproteins adsorbed were seen on analysis by denaturing polyacrylamide gel electrophoresis. Similarly, when a semipurified preparation of the plasma glycoprotein, ***lecithin*** - ***cholesterol*** ***acyltransferase*** (LCAT, EC 2.3.1.43) was applied to the columns some differences were evident; most LCAT was not retained by either matrix but when the bound fractions were eluted and analyzed electrophoretically the LCAT isolated by the Cra-Sepharose column was much purer. These findings suggest that immobilized Cra lectin has the potential for use in studies both to isolate and to characterize certain serum glycoproteins.

L3 ANSWER 22 OF 64 EMBASE on STN

ACCESSION NUMBER: 97043150 EMBASE
DOCUMENT NUMBER: 1997043150
TITLE: Terminalia arjuna: An ayurvedic cardiotonic, regulates lipid metabolism in hyperlipaemic rats.
AUTHOR: Khanna A.K.; Chander R.; Kapoor N.K.
CORPORATE SOURCE: R. Chander, Instituto de Farmacologia, Facultad de Ciencias Veterinarias, Universidad Austral de Chile, P.O. Box 567, Valdivia, Chile
SOURCE: Phytotherapy Research, (1996) 10/8 (663-665).
Refs: 19
ISSN: 0951-418X CODEN: PHYREH
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The lipid lowering action of the bark powder of Terminalia arjuna (T. arjuna) has been studied in triton and cholesterol fed rats. Serum lipids were found to be lowered by T. arjuna (100 mg/kg, b.w.) in triton induced hyperlipaemia. Chronic feeding of this powder (100 mg/kg, b.w., p.o.) in animals simultaneously fed with cholesterol (25 mg/kg, b.w.) for 30 days, caused lowering in lipids and protein levels of .beta.-lipoproteins followed by an increase in high density lipoprotein-cholesterol compared with the cholesterol fed groups. T. arjuna alters lipolytic activities in plasma, liver, heart and adipose tissues of hyperlipaemic rats. The lipid lowering action of this natural product is mediated through inhibition of hepatic cholesterol biosynthesis, increased faecal bile acid excretion and enhanced plasma ***lecithin*** : ***cholesterol*** ***acyltransferase*** activity and stimulation of receptor mediated catabolism of low density lipoprotein.

L3 ANSWER 23 OF 64 EMBASE on STN

ACCESSION NUMBER: 96314582 EMBASE
DOCUMENT NUMBER: 1996314582
TITLE: Lipid lowering activity of guggulsterone from Commiphora mukul in hyperlipaemic rats.

AUTHOR: Chander R.; Khanna A.K.; Kapoor N.K.
CORPORATE SOURCE: Division of Biochemistry, Central Drug Research Institute, PO Box 173,Lucknow 226 001, India
SOURCE: Phytotherapy Research, (1996) 10/6 (508-511).
ISSN: 0951-418X CODEN: PHYREH
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
029 Clinical Biochemistry
048 Gastroenterology
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The lipid lowering action of guggulsterone, the active constituent of guggulipid, has been studied in triton and cholesterol fed hyperlipaemic rats. Serum lipids were found to be lowered by guggulsterone (50 mg/kg, b.w.) in triton WR-1339 induced hyperlipaemia. Chronic feeding of this drug (5 mg/kg, b.w.) in animals simultaneously fed with cholesterol (25 mg/kg, b.w.) for 30 days, caused lowering in the lipid and apoprotein levels of very low density and low density lipoproteins in experimental animals. Guggulsterone activates lipolytic enzymes in plasma and liver as well as stimulated receptor mediated catabolism of low density lipoprotein. The hypolipidaemic activity of this drug is mediated through inhibition of hepatic cholesterol biosynthesis, increased faecal bile acid excretion and enhanced plasma ***lecithin*** : ***cholesterol*** ***acyltransferase*** activity.

L3 ANSWER 24 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 12
ACCESSION NUMBER: 1996:426281 BIOSIS
DOCUMENT NUMBER: PREV199699157337
TITLE: Treatment of severe hypercholesterolemia with a combination of beta-sitosterol and lovastatin.
AUTHOR(S): Richter, Werner O. [Reprint author]; Geiss, Hans C.; Soennichsen, Andreas C.; Schwandt, Peter
CORPORATE SOURCE: Klin. Grosshadern, Dep. Internal Med. II, Marchioninistr. 15, D-81377 Munich, Germany
SOURCE: Current Therapeutic Research, (1996) Vol. 57, No. 7, pp. 497-505.
CODEN: CTCEA9. ISSN: 0011-393X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Sep 1996
Last Updated on STN: 26 Sep 1996

AB The objective of this study was to determine whether adding the ***plant*** sterol beta-sitosterol to a lipid-lowering treatment regimen of lovastatin further decreases low-density lipoprotein (LDL) cholesterol. Thirty patients (16 men, 14 women) with a mean age of 45 +- 13 years, LDL cholesterol levels between 5.89 and 12.26 mmol/L, and triglyceride levels lt 2.82 mmol/L were randomly assigned to one of two study groups: group L (n = 15), which received lovastatin alone, and group LS (n = 15), which received lovastatin and beta-sitosterol. All patients were first treated for 16 weeks with the maximally tolerable dose of lovastatin. Beta-sitosterol 6 g/d was then added to the treatment regimen of group LS for 12 weeks, while group L continued with lovastatin alone. In the

beta-sitosterol group, mean LDL cholesterol decreased by an additional 12.8% to 15.1%, a significant difference from the corresponding change in the group receiving lovastatin alone. After discontinuation of beta-sitosterol, LDL cholesterol increased again. The decrease in LDL and total cholesterol before the addition of beta-sitosterol was comparable in the two groups: the mean reduction in LDL cholesterol was 30.4% in group L and 25.8% in group LS; total cholesterol was decreased by 24.2% in group L and 21. 1% in group LS. After the addition of beta-sitosterol, the total decrease in LDL cholesterol was 35.3% to 37.1%; the decrease in total cholesterol was 27.3% to 29.2%. No significant changes were observed in other lipid variables such as high-density lipoprotein cholesterol, lipoprotein(a), very-low-density lipoprotein triglycerides and cholesterol, apolipoprotein A-I, and ***lecithin*** - ***cholesterol*** ***acyltransferase*** activity.

L3 ANSWER 25 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1996:370437 BIOSIS
DOCUMENT NUMBER: PREV199699092793
TITLE: Epi-cochlioquinone A, a novel acyl-CoA:cholesterol acyltransferase inhibitor produced by Stachybotrys bisbyi.
AUTHOR(S): Fujioka, Tomoyuki [Reprint author]; Yao, Keiko; Hamano, Kiyoshi; Hosoya, Tsuyoshi; Kagaski, Takeshi; Furukawa, Yoji; Haruyama, Hideyuki; Sato, Sadao; Koga, Teiichiro; Tsujita, Yoshio
CORPORATE SOURCE: Pharmacol. Molecular Biol. Res. Lab., Sankyo Co. Ltd., 1-2-58 Hiromachi, Shinagawa-ku, Tokyo 140, Japan
SOURCE: Journal of Antibiotics (Tokyo), (1996) Vol. 49, No. 5, pp. 409-413.
CODEN: JANTAJ. ISSN: 0021-8820.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 14 Aug 1996
Last Updated on STN: 15 Aug 1996

AB A novel acyl-CoA: cholesterol acyltransferase (ACAT) inhibitor, designated epi-cochlioquinone A has been isolated from the fermentation broth of Stachybotrys bisbyi SANK 17777. The molecular formula, physicochemical properties, NMR spectroscopic analysis and X-ray crystallographic analysis revealed that this compound was a stereoisomer of cochlioquinone A, which has been previously reported as a nematocidal agent. It inhibited ACAT activity in an enzyme assay using rat liver microsomes with an IC-50 value of 1.7 mu-M. However, it showed about 10-fold less potent inhibitory effect on plasma ***lecithin*** ***cholesterol*** ***acyltransferase*** (LCAT) than on ACAT. In addition, it inhibited in vivo cholesterol absorption in rats by 50% at 75 mg/kg.

=> s l3 and transform?
L5 3 L3 AND TRANSFORM?

=> d l5 1-3 ibib ab

L5 ANSWER 1 OF 3 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 2004:441893 BIOSIS
DOCUMENT NUMBER: PREV200400446784
TITLE: Expression in yeast of a novel phospholipase A1 cDNA from

Arabidopsis thaliana.

AUTHOR(S): Noiriel, Alexandre; Benveniste, Pierre; Banas, Antoni; Stymne, Sten; Bouvier-Nave, Pierrette [Reprint Author]
CORPORATE SOURCE: CNRSInst Biol Mol PlantesDept Isoprenoides, Inst Bot, 28 Rue Goethe, F-67083, Strasbourg, France
Pierrette.Nave@bota-ulp.u-strasbg.fr

SOURCE: European Journal of Biochemistry, (September 2004) Vol. 271, No. 18, pp. 3752-3764. print.
ISSN: 0014-2956 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 17 Nov 2004
Last Updated on STN: 17 Nov 2004

AB During a search for cDNAs encoding ***plant*** sterol acyltransferases, we isolated four full-length cDNAs from Arabidopsis thaliana that encode proteins with substantial identity with animal ***lecithin*** : ***cholesterol*** ***acyltransferases*** (LCATs). The expression of one of these cDNAs, AtLCAT3 (At3g03310), in various yeast strains resulted in the doubling of the triacylglycerol content. Furthermore, a complete lipid analysis of the ***transformed*** wild-type yeast showed that its phospholipid content was lower than that of the control (void plasmid- ***transformed***) yeast whereas lysophospholipids and free fatty acids increased. When microsomes from the AtLCAT3- ***transformed*** yeast were incubated with di-(1-14C)oleyl phosphatidylcholine, both the lysophospholipid and free fatty acid fractions were highly and similarly labelled, whereas the same incubation with microsomes from the control yeast produced a negligible labelling of these fractions. Moreover when microsomes from AtLCAT3- ***transformed*** yeast were incubated with either sn-1- or sn-2-(1-14C)acyl phosphatidylcholine, the distribution of the labelling between the free fatty acid and the lysophosphatidylcholine fractions strongly suggested a phospholipase A1 activity for AtLCAT3. The sn-1 specificity of this phospholipase was confirmed by gas chromatography analysis of the hydrolysis of 1-myristoyl, 2-oleyl phosphatidylcholine. Phosphatidylethanolamine and phosphatidic acid were shown to be also hydrolysed by AtLCAT3, although less efficiently than phosphatidylcholine. Lysophospatidylcholine was a weak substrate whereas tripalmitoylglycerol and cholesteryl oleate were not hydrolysed at all. This novel A. thaliana phospholipase A1 shows optimal activity at pH 6-6.5 and 60-65 degreeC and appears to be unaffected by Ca2+. Its sequence is unrelated to all other known phospholipases. Further studies are in progress to elucidate its physiological role.

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:168132 CAPLUS
DOCUMENT NUMBER: 134:218021

TITLE: Nucleic acids encoding ***plant*** sterol acyltransferases and their use to modify sterol composition

INVENTOR(S): Lassner, Michael; Van Eenennaam, Alison
PATENT ASSIGNEE(S): Monsanto Company, USA

SOURCE: PCT Int. Appl., 127 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016308	A2	20010308	WO 2000-US23863	20000830
WO 2001016308	A3	20020117		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2381901	AA	20010308	CA 2000-2381901	20000830
BR 2000014154	A	20020507	BR 2000-14154	20000830
EP 1210417	A2	20020605	EP 2000-959644	20000830
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003508052	T2	20030304	JP 2001-520855	20000830
ZA 2002001410	A	20030606	ZA 2002-1410	20020219
PRIORITY APPLN. INFO.:			US 1999-152493P	P 19990830
			WO 2000-US23863	W 20000830

AB The present invention is directed to ***lecithin*** : ***cholesterol*** ***acyltransferase*** -like polypeptides (LCAT) and acyl CoA:cholesterol acyltransferases-like polypeptides (ACAT). The invention provides polynucleotides encoding such cholesterol:acyltransferase-like polypeptides, polypeptides encoded by such polynucleotides, and the use of such polynucleotides to alter sterol compn. and oil prodn. in ***plants*** and host cells. Four LCAT cDNAs are provided from Arabidopsis thaliana, as well as 2 genomic DNAs encoding LCAT from A. thaliana, 7 ESTs from soybean and 11 ESTs from corn. ACAT-encoding ESTs are also identified from A. thaliana, soybean, maize, and Mortierella alpina. Also provided are oils produced by the ***plants*** and host cells contg. the polynucleotides and food products, nutritional supplements, and pharmaceutical compn. contg. ***plants*** or oils of the present invention.

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	2000:384442 CAPLUS
DOCUMENT NUMBER:	133:27387
TITLE:	Polynucleotides (cDNA) and polypeptides of ***plant*** ***lecithin*** ***cholesterol*** ***acyltransferase*** sequence homologs, sequences and biological uses thereof
INVENTOR(S):	Cahoon, Rebecca E.; Kinney, Anthony J.; Sakai, Hajime; Shen, Jennie Bih-jien; Butler, Karlene H.; Saylor, James J.
PATENT ASSIGNEE(S):	E. I. Du Pont de Nemours & Co., USA
SOURCE:	PCT Int. Appl., 49 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032791	A2	20000608	WO 1999-US28586	19991202
WO 2000032791	A3	20000914		

W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-110782P P 19981203

AB The invention provides cDNA mols. encoding corn and soybean ***lecithin*** : ***cholesterol*** ***acyltransferases*** (LCAT) based on sequence homol. to known LCATs. The invention also provides a chimeric gene comprising the ***plant*** LCAT cDNA operably linked to suitable regulatory sequences (such as promoter and terminator sequences) and a host cell (such as yeast, bacteria, ***plant*** or virus) ***transformed*** with said chimeric gene for the recombinant prodn. of the LCAT. The invention further provides for the use of: (1) ***plant*** LCAT-specific primers for amplification of a nucleic acid encoding LCAT; (2) ***plant*** LCAT-specific probes in screening a cDNA or genomic library for nucleic acid mols. encoding LCAT and (3) polynucleotides comprising at least 30 nucleotides of the LCAT cDNA mol. or complement of such sequence, used for identifying an polynucleotide that affects the level of LCAT expression. Finally, the invention provides: (1) a method for evaluating the ability of a mol. to inhibit the activity of LCAT and (2) a method for selecting ***transformed*** ***plant*** cells overexpressing LCAT, which involves measuring the phytosterol concn. in the cell. CDNA and amino acid sequences of full length and partial cDNA clones encoding the corn LCAT sequence homologs are provided. Likewise, cDNA and amino acid sequences of a full length and a partial cDNA clone encoding soybean LCAT sequence homologs are provided. Using the BLASTX algorithm, the amino acid sequences of various putative corn LCATs were found to be 29.4% to 37.2% similar to the amino acid sequence of Arabidopsis thaliana GenBank accession no. AC004557 GI3935185, while the sequence of the putative soybean LCAT was found to be 57.% similar to the sequence of A. thaliana. The invention also discussed that overexpression or cosuppression of LCAT may be useful to genetically alter the content of phytosterol or lecithin in grains.

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	90.35	90.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.10	-2.10

FILE 'STNGUIDE' ENTERED AT 16:03:31 ON 10 DEC 2004

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Dec 3, 2004 (20041203/UP).

=> file agricola biosis embase caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.66	91.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.10

FILE 'AGRICOLA' ENTERED AT 16:09:53 ON 10 DEC 2004

FILE 'BIOSIS' ENTERED AT 16:09:53 ON 10 DEC 2004

FILE 'EMBASE' ENTERED AT 16:09:53 ON 10 DEC 2004

FILE 'CAPLUS' ENTERED AT 16:09:53 ON 10 DEC 2004

=> d l3 26-30 ibib ab

L3 ANSWER 26 OF 64 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 1995:24979 BIOSIS
DOCUMENT NUMBER: PREV199598039279
TITLE: Oyster mushroom (Pleurotus ostreatus) decreases serum and liver cholesterol and increases cholesterol 7-alpha-hydroxylase activity and fecal excretion of neutral sterols and bile acids in hypercholesterolemic rats.
AUTHOR(S): Bobek, P.; Ondreicka, R.; Klvanova, J.; Ozdin, L.
CORPORATE SOURCE: Res. Inst. Nutrition, Limbova 14, Bratislava 833 37, Slovakia
SOURCE: Nutrition Research, (1994) Vol. 14, No. 11, pp. 1683-1688. CODEN: NTRSDC. ISSN: 0271-5317.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Jan 1995
Last Updated on STN: 12 Jan 1995

AB Wistar rats fed a semisynthetic diet containing 0.3% cholesterol and supplemented with 5% dried whole oyster mushroom (Pleurotus ostreatus) had reduced serum and liver cholesterol levels by 32 and 55%, respectively, at the end of 8th week of the experiment.The reduction of cholesterol was due to the decreased cholesterol content in very-low-density lipoproteins (VLDL) and in low-density lipoproteins (LDL). Cholesterol concentration in high-density lipoproteins (HDL) increased significantly by 34%. Animals fed the oyster mushroom diet had elevated level of fecal excretion of neutral sterols by 32% and the excretion of bile acids by 55%. Activity of cholesterol 7-alpha-hydroxylase (a rate-limiting enzyme of cholesterol catabolism) was enhanced by 33% and the activity of ***lecithin*** : ***cholesterol*** ***acyltransferase*** was also increased by 13%.

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ACCESSION NUMBER: 94358700 EMBASE
DOCUMENT NUMBER: 1994358700
TITLE: Hypolipedaemic activity of picroliv in albino rats.
AUTHOR: Khanna A.K.; Chander R.; Kapoor N.K.; Dhawan B.N.
CORPORATE SOURCE: Division of Biochemistry, Central Drug Research Institute, PO Box 173,Lucknow 226001, India
SOURCE: Phytotherapy Research, (1994) 8/7 (403-407).
ISSN: 0951-418X CODEN: PHYREH
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The hypolipidaemic action of picroliv, a standarized preparation from Picrorhiza kurrooa, has been studied in normal as well as in triton- and cholesterol-fed rats. Serum lipids were found to be lowered by picroliv (25 mg/kg b.w.) in triton WR-1339-induced hyperlipaemia. Chronic feeding of this drug (6 mg/kg b.w.) in normal rats and in animals simultaneously treated with cholesterol (25 mg/kg b.w.) for 30 days caused lowering in the lipid and protein levels constituting .beta.-lipoproteins followed by an increase in high density lipoprotein cholesterol in experimental animals. Picroliv alters lipolytic activities in plasma, liver, heart an adipose tissues and stimulated receptor mediated catabolism of low density lipoprotein. The lipid lowering action of the natural product is mediated through inhibition of cholesterol biosynthesis in liver, increased faecal bile acid excretion and enhanced plasma ***lecithin*** : ***cholesterol*** ***acyltransferase*** activity.

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ACCESSION NUMBER: 1993:367422 BIOSIS
DOCUMENT NUMBER: PREV199396053097
TITLE: The role of cholesterol absorption and hepatic cholesterol content in high and low responses to dietary cholesterol and fat in pedigreed baboons (Papio species).
AUTHOR(S): Kushwaha, Rampratap S. [Reprint author]; Rice, Karen S.; Lewis, Douglas S.; McGill., Henry C., Jr.; Carey, K. D.
CORPORATE SOURCE: Dep. Physiol. and Med., Southwest Foundation Biomedical Res., PO Box 28147, San Antonio, TX 78228-0147, USA
SOURCE: Metabolism Clinical and Experimental, (1993) Vol. 42, No. 6, pp. 714-722.
CODEN: METAAJ. ISSN: 0026-0495.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 6 Aug 1993
Last Updated on STN: 8 Aug 1993

AB Selective breeding has produced baboon families with low and high plasma cholesterol responses to dietary cholesterol and fat. We used 12 high- and 12 low-responding (mainly in low-density lipoprotein (LDL) cholesterol) pedigreed baboons to determine whether cholesterol absorption and hepatic cholesterol concentration are associated with these responses. We measured cholesterol absorption first on the chow diet, which was low

in cholesterol and fat, and after 3 and 13 weeks on the challenge diets, which contained 0.45 mg cholesterol/kcal and 40% of calories as either coconut oil or corn oil. Plasma, lipoprotein, and hepatic cholesterol concentrations were measured 1 week after cholesterol absorption measurements. High-responding baboons had higher percentage cholesterol absorption than low-responding baboons on both chow and challenge diets, regardless of the type of dietary fat. Both high and low responders had higher percentage cholesterol absorption with corn oil than with coconut oil. High responders also had higher hepatic cholesterol concentrations than low responders on chow and after consuming the challenge diets for 4 weeks. After consuming the challenge diets for 14 weeks, low responders fed coconut oil had hepatic cholesterol levels equal to those of high responders, while low responders fed corn oil continued to have low hepatic cholesterol levels. Thus, percentage cholesterol absorption is consistently higher in high-responding baboons regardless of diet, but hepatic cholesterol concentration varies with duration of challenge and type of fat. The results suggest that both cholesterol absorption and hepatic cholesterol concentration regulate cholesterolemic responses to diet, but by different mechanisms.

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ACCESSION NUMBER: 92313699 EMBASE
DOCUMENT NUMBER: 1992313699
TITLE: The effect of borage oil consumption on human plasma lipid levels and the phosphatidylcholine and cholesterol ester composition of high density lipoprotein.
AUTHOR: Barre D.E.; Holub B.J.
CORPORATE SOURCE: Department of Nutritional Sciences, University of Guelph,Guelph, Ont. N1G 2W1, Canada
SOURCE: Nutrition Research, (1992) 12/10 (1181-1194).
ISSN: 0271-5317 CODEN: NTRSDC
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 017 Public Health, Social Medicine and Epidemiology
029 Clinical Biochemistry
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB The effect of consuming an enriched source of gamma-linolenic acid (GLA, 18:3 n-6) in the form of borage oil on the plasma lipid levels of human volunteers and the fatty acid composition of high density lipoprotein (HDL) - phosphatidylcholine (PC) and HDL- cholesterol ester (CE) was examined. Furthermore, an estimation was made of the relative utilization of GLA and dihomo-gamma-linolenic acid (DGLA, 20:3 n-6) by the plasma ***lecithin*** : ***cholesterol*** ***acyltransferase*** (LCAT) reaction. For this purpose, six healthy male subjects consumed encapsulated borage oil (21.8 wt % GLA) so as to provide an average intake of 5.23 g GLA/person/day for 42 consecutive days followed by a wash-out period of an additional 42 days. Analysis of plasma lipids (triglycerides, total cholesterol, HDL-cholesterol, low density lipoprotein (LDL) - cholesterol) and the plasma HDL-cholesterol:total cholesterol ratio indicated no significant change in any of the latter arising from the supplementation. Consumption of the borage oil supplement was found to produce marked alterations in the fatty acid compositions of HDL-PC and HDL-CE. Whereas only a moderate accumulation in PC (up to 0.6 mol %) of GLA was found with supplementation, a more dramatic rise in DGLA (by 3.9

mol %) and arachidonic acid (AA, 20:4 n-6) (by 3.3 mol %) was found. These changes were reversible by day 64. In contrast to the HDL-PC, the GLA accumulation in HDL-CE exceeded that of DGLA such that the net rise was 1.8 mol % as compared to only 0.8 mol % for DGLA. Positional analysis of the HDL- PC from subjects at day 43 revealed GLA and DGLA to reside almost exclusively in the 2-position (> 98 %). Dividing the percentages of unsaturated fatty acids in the HDL-CE relative to their levels in the corresponding 2-position of PC provided the following estimated order of fatty acid selectivity for the plasma LCAT reaction: GLA > linoleic acid (LA, 18:2 n-6) > oleic acid (OA, 18:1 n-9) > AA > DGLA .gtoreq. docosahexaenoic acid (DHA, 22:6 n-3).

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ACCESSION NUMBER: 1993:98481 BIOSIS
DOCUMENT NUMBER: PREV199395053677
TITLE: Effect of dietary safflower phospholipid and soybean phospholipid on plasma and liver lipids in rats fed a cholesterol-free diet.
AUTHOR(S): Iwata, Toshio [Reprint author]; Takehisa, Fumiyuki; Tsutsumi, Kentarou; Furukawa, Yuji; Kimura, Shuichi
CORPORATE SOURCE: Dep. Res. Development, Rinoru Oil Mills Co., Ltd., Minato-ku, Nagoya 455, Japan
SOURCE: Journal of Clinical Biochemistry and Nutrition, (1992) Vol. 13, No. 2, pp. 107-115.
CODEN: JCBNER. ISSN: 0912-0009.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Feb 1993
Last Updated on STN: 10 Feb 1993

AB The effect of dietary safflower phospholipid (Saf-PL) and soybean phospholipid (Soy-PL) on plasma, lipid, and fecal lipids in rats fed a cholesterol-free diet was compared with that of a triglyceride mixture (control). The triglyceride mixture (SP-Oil) of safflower oil and palm oil (8:2) contained almost comparable amounts of linoleic acid to safflower phospholipid or soybean phospholipid. Concentrations of total cholesterol in plasma of rats fed the Saf-PL and Soy-PL diets were significantly decreased in comparison with that of the SP-Oil diet. Saf-PL induced a reduction in the concentration of liver cholesterol compared with SP-Oil. Soy-PL tended to reduce the liver cholesterol. The proportions of total cholesterol in all lipoprotein fractions were similar among the groups. The activity of plasma ***lecithin*** - ***cholesterol*** ***acyltransferase*** was increased in rats fed the phospholipid diets; Saf-PL indicated the highest value. Saf-PL and Soy-PL caused an enhanced excretion of not only neutral steroids but also acidic steroids into feces compared with SP-Oil. These results suggest that, in addition to soybean phospholipid, safflower phospholipid decreases plasma and liver cholesterol in rats fed a cholesterol-free diet and safflower phospholipid causes a favorable alteration in plasma and liver lipids compared with soybean phospholipid.

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CA SUBSCRIBER PRICE	0.00	-2.10

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